

**Virginia Electric and Power Company
North Anna Power Station
1022 Haley Drive
Mineral, Virginia 23117**

July 1, 2015

Attention: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Serial No.: 15-312
NAPS: JHL
Docket Nos.: 50-338, 50-339
License Nos.: NPF-4, NPF-7

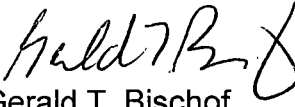
Dear Sirs:

Pursuant to 10CFR50.73, Virginia Electric and Power Company hereby submits the following Licensee Event Report applicable to North Anna Power Station Units 1 and 2.

Report No. 50-338/2015-003-00

This report has been reviewed by the Facility Safety Review Committee and will be forwarded to the Management Safety Review Committee for its review.

Sincerely,


Gerald T. Bischof
Site Vice President
North Anna Power Station

Enclosure

Commitments contained in this letter: None

cc: United States Nuclear Regulatory Commission
Region II
Marquis One Tower
245 Peachtree Center Ave., NE, Suite 1200
Atlanta, Georgia 30303-1257

NRC Senior Resident Inspector
North Anna Power Station

TEZZ
NRR

**LICENSEE EVENT REPORT (LER)**(See Page 2 for required number of
digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME

North Anna Power Station, Unit 1

2. DOCKET NUMBER

05000338

3. PAGE

1 OF 4

4. TITLE

Both Motor Driven Auxiliary Feedwater Pump House Fans Concurrently Tagged Out For Maintenance Due To The Design Basis Not Clearly Understood

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
05	08	2015	2015	003	00	07	01	2015	North Anna Power Station, Unit 2	05000339
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
1	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
10. POWER LEVEL 100	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT

Gerald T. Bischof, Site Vice President

TELEPHONE NUMBER (Include Area Code)

(540) 894-2101

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE)☒ NO**15. EXPECTED SUBMISSION DATE**

MONTH DAY YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On May 8, 2015, at 0358 hours, with North Anna Unit 2 operating at 100 percent power, both of the ventilation fans for the Unit 2 Motor Driven Auxiliary Feedwater (AFW) Pump House were simultaneously tagged out for preventive maintenance. The ventilation fans for the Unit 2 Motor Driven AFW Pump House were returned to operable on May 8, 2015 at 1630 hours. Subsequently, it was determined that tagging out both ventilation fans simultaneously challenged operability of the safety related Motor Driven AFW Pumps as required by Technical Specification 3.7.5. A review determined that the Motor Driven AFW Pump House ventilation fans for both Units had been simultaneously tagged out for maintenance several times during the previous three years. The Turbine Driven AFW Pump was operable during these periods and capable of performing its design function. This issue was determined to be reportable to the NRC in accordance with 10 CFR 50.73(a)(2)(i)(B) for "any operation or condition which was prohibited by the plant's Technical Specifications." The health and safety of the public were not affected by this event.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

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1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
		YEAR	SEQUENTIAL NUMBER	REV. NO.	
North Anna Power Station, Unit 1	05000338	2015	- 003	- 00	2 OF 4

NARRATIVE**1.0 DESCRIPTION OF THE EVENT**

On May 11, 2015, it was identified that, on May 8, 2015 at 0358 hours, both ventilation fans (EIS Component FAN) for the Unit 2 Motor Driven Auxiliary Feedwater (AFW) Pump House (EIS System BA) were simultaneously tagged out for preventive maintenance, as stipulated on the daily work plan. The ventilation fans for the Unit 2 Motor Driven AFW Pump House were returned to operable on May 8, 2015 at 1630 hours.

Based on the identification that both ventilation fans for the Unit 2 Motor Driven AFW Pump House were simultaneously tagged out for maintenance, a past operability review for the previous three years was performed for North Anna Units 1 and 2. This review identified that there were four occasions on each Unit where the Motor Driven AFW Pump House ventilation fans were tagged out simultaneously which challenged operability of the Motor Driven AFW Pumps (EIS Component P) as required by Technical Specification 3.7.5.

Technical Specification 3.7.5 requires three AFW trains to be OPERABLE (two motor driven trains and one turbine driven train). The Technical Specification definition of OPERABILITY is "A system, subsystem, train, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s)." The ventilation fans for the Motor Driven AFW Pump House are considered other auxiliary equipment within the context of the Technical Specification definition of OPERABILITY. Tagging out both Motor Driven AFW Pump House fans simultaneously challenged operability of the safety related Motor Driven AFW Pumps as required by Technical Specification 3.7.5.

The ventilation fans are powered from emergency power sources to ensure the Motor Driven AFW Pump House temperature is maintained less than 120 degrees Fahrenheit (F) following a design basis event. A calculation was previously performed and determined that the Motor Driven AFW Pump House would reach 120 degrees F in 8.7 hours (assuming conservative ambient air and wall temperatures) following a loss of forced ventilation when both of the Motor Driven AFW Pumps are in service.

The Updated Final Safety Analysis Report (UFSAR) states that "The auxiliary feedwater system must be capable of functioning for extended periods, allowing time either to

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
North Anna Power Station, Unit 1	05000338	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 4
		2015	- 003	- 00	

NARRATIVE

restore normal feedwater flow or to proceed with an orderly cooldown of the plant to the reactor coolant temperature where the residual heat removal system can assume the burden of decay heat removal." The UFSAR also states "A source of feedwater will be available for in excess of one week."

This issue was determined to be reportable to the NRC in accordance with 10 CFR 50.73(a)(2)(i)(B) for "any operation or condition which was prohibited by the plant's Technical Specifications."

2.0 SIGNIFICANT SAFETY CONSEQUENCES AND IMPLICATIONS

No significant safety consequences resulted from this event because the Motor Driven AFW Pump House ventilation was returned to operable on May 8, 2015, at 1630 hours, without exceeding design basis temperatures. Also, the Turbine Driven AFW Pump was operable during the event and would perform its design function. During a design basis event with the Motor Driven AFW Pumps in service, operators would enter the pump house to refill the Emergency Condensate Storage Tank (EIS Component - TK) and would note any elevated room temperatures. Action could readily be taken at that time to restore ventilation. The health and safety of the public were not affected by this event.

3.0 CAUSE

A cause evaluation determined the event was due to the design basis for the Motor Driven AFW Pump House ventilation fans not being universally understood across the organization which led to the fans being simultaneously tagged out for maintenance.

4.0 IMMEDIATE CORRECTIVE ACTION(S)

The ventilation fans for the Unit 2 Motor Driven AFW Pump House were returned to operable on May 8, 2015 at 1630 hours.

5.0 ADDITIONAL CORRECTIVE ACTIONS

A Unit 1 and Unit 2 Limiting Condition for Operation (LCO) tracking information action has been entered to prevent removing from service any safety related ventilation fans that cool the ambient temperatures inside valve houses, pump houses and enclosures that are necessary to maintain operability of safety related systems (e.g., AFW, Service Water, Rod Drive); and are not explicitly referenced in the Technical Specifications, Technical Specification Bases or the Technical Requirement Manual.

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
North Anna Power Station, Unit 1	05000338	YEAR	SEQUENTIAL NUMBER	REV NO.	4 OF 4
		2015	- 003	- 00	

NARRATIVE

6.0 ACTIONS TO PREVENT RECURRENCE

Lessons learned from this event are being reviewed for incorporation into appropriate training programs.

The cause evaluation report addresses additional corrective actions that are being tracked in the Corrective Action Program.

7.0 SIMILAR EVENTS

None

8.0 ADDITIONAL INFORMATION

North Anna Units 1 and 2 continued operating in Mode 1, at 100 percent power during this event.